

FELIXSTOWE & WALTON
URBAN DISTRICT.

Medical Officer's
Report
For the Year 1909.





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Report

For the Year 1909.

SANCROFT,
BATH ROAD,
FELIXSTOWE,
FEBRUARY 1ST, 1910.

TO THE URBAN DISTRICT COUNCIL OF FELIXSTOWE AND WALTON.

GENTLEMEN,

BIRTHS.

I have the honour to present to you my Annual Report for the year 1909, and a perusal of our vital statistics will show that we have many reasons to be satisfied. Our Birth Rate is unfortunately very low, being 16·7 per 1,000, the lowest recorded rate during the last ten years, and 9 per 1,000 less than the average rate for the whole of England and Wales. The probable reason for this was stated in my last year's report. At the same time, however, our Death Rate is exceptionally small, being only 9·47 per 1,000 ; *i.e.*, 5 per 1,000 lower than the average rate for the whole kingdom, while our Death Rate from the principal epidemic diseases is only ·35 per 1,000, less than a third of the rate for the whole of England and Wales.

INFANTILE MORTALITY.

The Infantile mortality is 90·27 per 1,000 births registered, the average rate for the whole kingdom being 109.

TABLE IV.

FELIXSTOWE AND WALTON URBAN DISTRICT.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1909.

Causes of Death.		Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.						
I		All ages. 2	Under 1 year. 3	1 and under 5. 4	5 and under 15. 5	15 and under 25. 6	25 and under 65. 7	65 and upwards. 8
Whooping Cough ..	..	1	1					
Diphtheria (including Membranous croup) ..	..	3		2	1			1
Epidemic Influenza ..	..	1						
Enteritis ..	..	3	2	1				1
Erysipelas ..	..	1						
Phthisis (Pulmonary Tuberculosis) ..	..	7				1	6	1
Other tuberculous diseases ..	..	4	2	1				1
Cancer, malignant disease ..	..	7				1	3	3
Bronchitis ..	..	4	1				2	
Pneumonia ..	..	2					1	
Pleurisy ..	..	1						
Premature birth ..	..	4	4				1	
Heart diseases ..	..	11				1	6	4
Accidents ..	..	4		1			3	
Suicides ..	..	2				1	1	4
Cerebral Hæmorrhage ..	..	8					4	
General Paralysis ..	..	1					1	
Nephritis ..	..	4					3	1
All other causes ..	..	13	3	1	1		2	6
All causes ..	..	81	13	6	2	4	32	24

TABLE V.

FELIXSTOWE AND WALTON URBAN DISTRICT. INFANTILE MORTALITY DURING THE YEAR 1909.

Deaths from stated Causes in Weeks and Months under One Year of Age.

Cause of Death.	Under 1 Week.	1-2 Weeks.	3-4 Weeks.	Total under 1 Month.	2-3 Months.	5-6 Months.	6-7 Months.	Total Deaths under 1 Year.
Whooping Cough					1			1
Enteritis, Muco-enteritis, Gastro-enteritis			1	1	1			2
Premature Birth	4			4				4
Atrophy, Debility, Marasmus	1	1	1	3				3
Tuberculous Meningitis						1	1	2
Bronchitis					1			1
Totals	5	1	2	8	3	1	1	13

The total number of Deaths registered under one year of age was thirteen, and four of these were due to premature birth.

MORTALITY.

We have had seven deaths from Phthisis as compared with five last year, and seven from Cancer as compared with three last year, but notwithstanding this, our general death rate is lower.

ZYMOTIC DISEASES.

Our record for infectious diseases is satisfactory, for though the actual number of cases notified is slightly larger than that of last year, being 88 as compared with 80; of these 36 were Measles and 11 German Measles, neither of which are notified in most places.

The remainder were made up as follows :—

Diphtheria, ²⁹8 cases ; Scarlet Fever. 6 cases ; Erysipelas, 5 cases ; and Tuberculosis, 1 case notified by the Poor Law Medical Officer.

INFECTIOUS DISEASES NOTIFIED.

The number of Diphtheria notifications is less than half those in 1908, but even this number requires explanation. The epidemic which appeared to have been stamped out at the end of 1908 commenced again in January, and the Temporary Isolation Hospital

was re-opened on January 16th. During the next six months, it was kept continuously open, and was closed on July 16th. During this period of six calendar months, 16 cases of Diphtheria were treated, one of which was of the Laryngeal variety and required the operation of Tracheotomy. Another case required two operations for Suppurating Glands in the neck. All of the patients recovered and left the Hospital quite well.

Antitoxin was used in amounts varying from 3,000 to 9,000 units according to the severity of the disease.

The number of Diphtheria notifications in each month was as follows :—

January	..	5 cases.
February	..	5 „
March	..	9 „
April	..	4 „
May	..	1 „
June	..	2 „
August	..	1 „
November	..	2 „

The source of infection in every case was made the subject of careful enquiry, and it was supposed that two at least of the instances in January may have been due to imperfectly disinfected houses and furniture, as they occurred in dwellings which had been visited by Diphtheria during the previous year. A more complete mode of disinfection was accordingly adopted, the whole house in every case being fumigated with formalin vapour, and the rooms used by the patient being sprayed in addition with a .5 per cent. solution of formaldehyde in water.

The above reason did not, however, account for all the cases which had been notified, and it was supposed that infection was being spread of mild unrecognized attacks of the disease. Most of the notifications having been among the school children, it was decided to close the Council Schools from March 15th for a period of five weeks, including the Easter Holidays; Sunday schools and evening classes being closed during the same period.

This course, which was considered unduly drastic by the Education Committee, was adopted after due consideration, and after all other means of prevention had been tried, in order to prevent the children of the infected area of Walton from spreading the disease to the hitherto uninfected area of Felixstowe.

The result at least seems to have been satisfactory, as the figures for the succeeding months appear to show. Of the subsequent cases, moreover, five out of the ten owed their origin to infection outside the district.

For all practical purposes the epidemic may be said to have ceased in April, since in only one instance after this month was the source of infection doubtful; all the others being traced to places outside the Felixstowe and Walton area.

The total cost of the Temporary Isolation Hospital and its administration during the 47 weeks in which it was actually open was £374 18s. 0d., which includes the cost of the original furnishing.

The average number resident per day during this time was seven, four of whom were patients and three nurses and servants.

The total cost of food supplied was £112 11s. 6d., making an average of less than eight shillings a week per head for food. For the efficient and economical management of details and expenditure in the Hospital, I am largely indebted to Mrs. Kedge, of the Felixstowe Nursing Home, whose help has been of the utmost value.

Plans and specifications have been prepared by the Surveyor, in consultation with Colonel Elliston and myself, for the erection of a permanent Isolation Hospital, on a piece of land in an outlying part of Old Felixstowe. These plans are in accordance with the requirements of the Local Government Board, and due regard has been paid to economy so far as it is consistent with sanitation and convenience. Many details yet remain to be settled, and in the meantime the Temporary Hospital is sufficient for our requirements.

Notices have been received from the Medical Officers of other districts about the removal to Felixstowe of people previously exposed to infection of Diphtheria, Enteric Fever, and Plague. All these cases have been investigated, but in no instance has the disease subsequently developed.

The Council Schools have been inspected and are now in a most satisfactory sanitary condition. The whole of the improvements suggested in my reports to the Health Committee have been carried out.

The lavatories are now supplied with water directly from the mains, the closets are of a new and improved pattern, with an abundant flush of water, the urinals

are provided with an adequate water supply, and the playgrounds are properly paved and drained.

WATER SUPPLY.

The water supply of the town has been the subject of complaints, on account of a red deposit which is very detrimental to its appearance as a beverage. As I have already stated in previous reports, our water is derived from a deep chalk well in Lower Trimley. In common with many other wells similarly situated, its water contains a fairly large trace of soluble bicarbonate of iron. On exposure of the water to air the soluble bicarbonate is changed into hydrated oxide of iron, which is subsequently deposited as a red precipitate.

The Water Company have now at considerable expense provided an apparatus, Candy's Patent Filters, by which the iron is precipitated and removed from the water before it is pumped into the reservoir. The process consists in filtering the water through pebbles and sand on to a layer of Polarite (a patent compound of magnetic oxide of iron and carbon), which immediately oxidizes the bicarbonate of iron without any change in its own composition. The resulting deposit is then arrested by a filter of fine sand and the water flows clear into the reservoir. The oxidation process is aided by the spraying of the water into a compressed air chamber before it comes into contact with the polarite.

The results may possibly not be apparent at once, from the fact that a large amount of deposit is doubtless present in the mains, and many flushings will be required before this can be completely removed.

Considerable improvement has, however, already taken place. Analyses of the water continue to show that it is of exceptional organic purity and absolutely safe for drinking purposes, though its total hardness 14·5 degrees renders it somewhat unsatisfactory for washing.

It is questionable, however, if any scheme for softening the water by chemical means before it reaches the consumers would not be attended by disadvantages, graver than the defects it would attempt to remedy.

The water of the Spa Well has again been subjected to a complete chemical analysis by Mr. Lincolne Sutton, the County Analyst. The results being as follows :—

Total Solids in Solution	..	59·28	grains per gallon.
Tree Ammonia	.. ..	·048	„ „
Albuminoid Ammonia	..	Mere trace.	
Chlorine	.. ..	22·2	grains per gallon.
Nitrogen as Nitrates	..	Nil.	
„ „ Nitrites	..	Nil.	
Oxygen absorbed in 4 hours		Mere trace.	
Lime	.. ..	7·96	grains per gallon.
Magnesia	.. ..	4·06	„ „
Sulphuric Anhydride	..	2·29	„ „
Silica Iron and Alumina	..	1·72	„ „
Hardness before boiling	..	12·3	degrees.
„ after	..	9·3	„
Soda	.. ..	16·91	grains per gallon.
Potash	.. ..	1·2	„ „

The Mineral constituents are probably combined as under :—

Carbonate of Lime	..	14·20	grains per gallon.
Carbonate of Magnesia	..	3·11	„ „
Sulphate of Magnesia	..	3·45	„ „

Chloride of Magnesia	..	3·07	grains per gallon.
Chloride of Soda	.. ..	31·83	„ „
Chloride of Potash	.. ..	1·90	„ „
Silica Non-Alumina	.. ..	1·72	„ „
		<hr/>	
		59·28	

PHYSICAL CHARACTER.—Bright and clear when first received, becoming turbid and depositing rusty sediment of oxide of iron. Alkalinity as Carbonate of Lime 17·01 degrees.

Total Iron225 grains per gallon.

Iron remaining in Solution

after deposition of Oxide .05 „ „

REMARKS.—This is a water of exceptional organic purity and free from all trace of surface or other pollution. It is bacteriologically good. Minerally, it is distinctly a magnesian chalybeate water of a muriated character, containing $3\frac{1}{2}$ grains per gallon of Epsom Salts. It is a palatable water of unexceptionable quality for drinking purposes.

It will be seen from this analysis that the Spa Well water, like the town water, is mildly chalybeate and alkaline, and though not highly mineralized contains an appreciable quantity of iron which would of course remain in solution if the water were supersaturated with Carbonic Acid Gas.

SEWAGE.

The new Engines and Air Compressors which were installed last year at the Sewage Outfall Works in order to provide reserve power for working the Ejectors have proved most satisfactory, and it is a matter of con-

gratulation that in the absence of a natural fall for our Sewage, we have a hydropneumatic system capable of elevating a much larger daily volume than we are likely to have to dispose of for several years to come.

The Refuse Destructor has worked most satisfactorily and economically.

MILK SUPPLY.

The Milk supply of the district is on the whole most satisfactory. Specimens from the different vendors have been taken and submitted to the Public Analyst from time to time, and the reports have been favourable in every case. In one or two instances it has been pronounced exceptionally rich in character.

COWSHEDS AND SLAUGHTER HOUSES.

The Cowsheds and Dairies have been regularly inspected and systematic washing of the hands of the milkers and the udders of the cows has been adopted in almost every case.

The Slaughter Houses have been systematically visited, and in most cases suggested improvements have been adopted. These refer mainly to the provision of hot and cold water, to the paving of the yards, and the covering of the lower portion of the walls of the slaughter house with an impermeable dado.

The situation of most of the slaughter houses is open to grave objection, and the question of a Public Abattoir is one which should sooner or later engage the attention of the Council, both on sanitary and humanitarian grounds.

It is obviously undesirable that the fasting pens should immediately adjoin the slaughter house, and that animals should be subjected to the sights, sounds and smells which necessarily accompany this proximity. The small area of the yards and premises where slaughtering is carried on necessitate these undesirable conditions, and it is practically impossible to alter them without undue hardship to individuals, unless a well-arranged Public Abattoir is constructed.

A question is asked by the Local Government Board as to Meat Inspection. No regular inspection of meat is practised, nor have we an Officer trained in this branch of sanitary work.

BAKEHOUSES.

The Bakehouses have been regularly inspected, and in all cases the requirements of the Inspector have been complied with. Two of these Bakehouses are really radically unsuitable, but every care is apparently taken to keep them clean and as well lighted and ventilated as circumstances will allow.

SANITARY WORK.

The following particulars of sanitary work in the district have been supplied to me by the Surveyor :—

New Sewers constructed	..	847 yards.
New Surface Water Drains	633	„
Houses erected	.. ..	59.
Privies abolished	.. ..	35.
Cesspools abolished	.. ..	9.
Nuisances abated	.. ..	63.
Rooms disinfected 87, in 41 different premises.		
Cesspools emptied	.. ..	99.
Privies emptied	.. ..	119.

Opposition has of course been occasionally encountered where the abolition of privies and cesspools has been ordered, and the provision of a water supply from the Public Mains insisted upon, but in no case has a prosecution been necessary. Time has been allowed in some cases, and in others a temporary compromise has been effected. There can be no doubt, however, that the water carriage of sewage should be sooner or later enforced wherever it is possible.

Negotiations have been in progress about a piece of land for use as a Cemetery, but the matter is still under discussion.

POPULATION & DEATH RATE.

The population of Felixstowe and Walton is now estimated at 8,550, the number of inhabited houses being 1,710, and the area of the district 4,281 acres.

The low Death Rate and the exceptionally healthy character of the place are doubtless due to a combination of several factors. The air is bracing, and the climate dry, the bright sunshine record for 1908 being 1,751 hours as compared with 1,582 hours for the average of the whole of the East of England; the subsoil is red crag of the Pliocene formation, and thus a dry surface is secured. The water supply is above suspicion, the town is exceptionally clean, well drained and well sewered, and every means is taken to secure efficient sanitation.

The appended tables give details as to vital statistics, causes of death, infectious diseases and infantile mortality.

I am, Gentlemen, Your obedient Servant,

G. J. CONFORD, M.D., Oxon.,

Medical Officer of Health.

To the Chairman and Members of the Felixstowe and Walton
Urban District Council.

TABLE I.

FELIXSTOWE AND WALTON URBAN DISTRICT.

Vital Statistics of the Whole District during 1909 and Previous Years.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
		Number.	Rate.*	Under 1 Year of Age		At all Ages.					Number.	Rate.*
				Number.	Rate per 1000 Births registered	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1899	5542	134	24.1	23	171.6	72	12.9				72	12.2
1900	5868	140	25.0	16	114.2	67	11.6				64	11.4
1901	5815	166	28.5	14	84.3	75	12.8				74	12.7
1902	6194	140	22.6	15	107.0	73	11.7				72	11.6
1903	6516	140	21.4	12	85.7	65	9.9				65	9.9
1904	6853	149	21.7	18	120.8	69	10.0				79	10.0
1905	7207	146	20.2	10	68.4	76	10.5	2	2		74	10.2
1906	7550	158	20.9	15	94.9	74	9.8				83	10.4
1907	7900	138	17.4	6	43.4	71	8.9			4	75	9.5
1908	8300	160	19.2	18	112.5	85	10.2				87	10.4
Averages for years 1899-1908.	6774	147.1	22.1	14.7	100.2	73.7	10.8				73.5	10.8
1909	8550	144	16.7	13	90.27	81	9.47			2	83	9.7

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

TABLE III.

FELIXSTOWE AND WALTON URBAN DISTRICT.

Cases of Infectious Disease notified during the Year 1909.

Notifiable Disease.	Cases Notified in Whole District.					
	At all Ages.	At Ages—Years.				
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.
Diphtheria (including Membranous croup)	29		11	12	3	3
Erysipelas	5	1			1	
Scarlet fever	6			4	2	
Tuberculosis	1					
Measles	36	2	6	22	6	1
German Measles	11		4	6	1	
Totals	88	3	21	44	13	6
						1